

# **Mineral Industry Surveys**

For information, contact:
Daniel Edelstein, Copper Commodity Specialist
U.S. Geological Survey
989 National Center
Reston, VA 20192

Telephone: (703) 648-4978, Fax: (703) 648-7757

E-mail: dedelste@usgs.gov

Janet Richards (Data)
E-mail: jricharl@usgs.gov
Melissa Foley (Data)
E-mail: mfoley@usgs.gov

Telephone: (703) 648-7951, Fax: (703) 648-7975

MINES FaxBack: (703) 648-4999 Internet: http://minerals.usgs.gov/minerals

#### **COPPER IN MAY 2000**

Average daily mine production in May rose slightly as several mines reported the highest average production level of the year. Primary smelter and refinery production rose sharply following restart of a smelter that had been temporarily closed for maintenance. Primary smelter and refinery production for the first 5 months of the year, however, were 36% and 22%, respectively, lower than the equivalent period in 1999. Consumption for the first 5 months of 2000 was essentially unchanged from that of 1999. A boost in refined consumption at brass mills offset the decline in consumption at wire rod mills.

Although production of wire rod by domestic mills declined by about 59,000 tons (6%) during the first 5 months of 2000 compared with the first 5 months of 1999, apparent domestic industrial consumption of wire rod declined only by about 15,000 tons (2%). According to Bureau of the Census data (adjusted by the USGS to account for misclassified imports of wire rod from Mexico), net imports of wire rod for the first 4 months of the year rose from 38,000 tons in 1999 to 70,000 tons in 2000 and accounted for most of the shortfall in domestic wire rod production. Canada and Mexico have been the principal sources of imported wire rod in 2000, each accounting for about 48% of imports. Brazil emerged as an important source of imports late in 1999, but to date has only supplied about 3,800 tons of wire rod in 2000.

According to industry reports, the North American wire rod market was becoming increasingly tight, with low consumer inventories and pent-up demand for greater wire rod shipments. In May, domestic wire rod inventories held at wire rod mills fell to the lowest level since July 1999. Hence the year-on-year decline in apparent rod consumption may have resulted from supply

shortages rather than weaker demand. In April, Grupo Minero México closed its Mexican wire rod mill for maintenance and experienced a delayed restart. As a result, Grupo announced an across-the-board 20% cutback in rod shipments for June. Southwire Company, which shuttered its secondary smelter and electrolytic refinery at the end of May, also reported having production difficulties (Platt's Metals Week, 2000).

Interest in developing internet tools for the transaction of copper industry business continues to gain momentum. At the end of June, a consortium of 14 major mining and metals companies launched their internet-based procurement marketplace (http://www.mmprocurement.com). While not yet operational as a marketplace, it provides a forum to introduce and discuss future expectations. The consortium has begun a comprehensive and competitive review of three different technologies to support their procurement platform. Similarly, ecopper.com launched its introductory internet site (http://www.ecopper.com) where it outlines its mission as a "marketplace where buyers and sellers meet directly through a secure and reliable system reducing the overall costs for its community." Pyramid Cyberway Ltd. has launched an operational web marketplace (http://www.coppernet.com) for the buying and non-ferrous metals including refined copper, copper scrap, and copper and copper alloy mill products.

#### **Reference Cited**

Platt's Metals Week, 2000, US rod tightens on production glitches; cathode firm: Platt's Metals Week, v. 71, no. 21, May 22, p. 10.

### ${\bf TABLE~1}$ SALIENT STATISTICS OF THE COPPER INDUSTRY IN THE UNITED STATES 1/

(Metric tons, unless otherwise specified)

				2000	
	Source	_			January -
	table 2/	1999 p/	April	May	May
Production:					
Primary:					
Mine, recoverable	(2)	1,600,000	119,000 r/	127,000	613,000
Smelter 3/	(3)	1,090,000	64,300	75,400	349,000
Refinery:					
Electrolytic:					
Domestic	(4)	1,110,000	64,700	72,500	382,000
Foreign	(4)	196,000	11,300	12,900	56,400
Electrowon	(4)	586,000	47,000 r/	47,800	235,000
Total	(4)	1,890,000	123,000	133,000	673,000
Secondary recoverable copper:					
Refineries	(5)	243,000	22,500	28,400	115,000
Ingot makers 4/	(5)	133,000	11,100	11,100	55,600
Brass and wire-rod mills	(5)	830,000	68,500	70,700	358,000
Foundries, etc. 4/	(5)	51,100	4,260	4,260	21,300
Consumption:					
Apparent	(8)	3,120,000 r/	267,000	NA	NA
Refined (reported)	(7)	2,980,000	258,000	247,000	1,250,000
Purchased copper-base scrap	(9)	1,610,000	133,000	135,000	680,000
Stocks at end of period:					
Total refined	(11)	567,000 r/	494,000 r/	434,000	XX
Blister, etc.	(11)	138,000	119,000	104,000	XX
Prices:	_				
U.S. producer cathode					
(cents per pound) 5/	(12)	75.913	81.419	86.862	85.470
Imports: 6/					
Ores and concentrates 7/	(14)	143,000		NA	NA
Refined	(14)	837,000	92,100	NA	NA
Exports: 6/		•	•		
Ores and concentrates 7/	(15)	63,100	21,900	NA	NA
Refined	(15)	25,200	12,200	NA	NA

p/ Preliminary. r/ Revised. NA Not available. XX Not applicable. -- Zero.

 $<sup>1/\,</sup>Data\ are\ rounded\ to\ no\ more\ than\ three\ significant\ digits,\ except\ prices;\ may\ not\ add\ to\ totals\ shown.$ 

 $<sup>2/\,\</sup>mbox{Numbers}$  in parentheses refer to the detailed tables where these data are located.

<sup>3/</sup> From domestic and foreign ores.

<sup>4/</sup> Monthly data and 1999 cumulative data estimated based on 1998 monthly average.

<sup>5/</sup> Source: Platt's Metals Week.

<sup>6/</sup> Source: Bureau of the Census.

<sup>7/</sup> Copper content.

## ${\small \mbox{TABLE 2}} \\ {\small \mbox{MINE PRODUCTION OF RECOVERABLE COPPER} } \\ {\small \mbox{IN THE UNITED STATES 1/} } \\ {}$

#### (Metric tons)

Period	Arizona	Others 2/	Total
1999: p/			
January - May	483,000	258,000	741,000
May	96,300	47,800	144,000
June	87,300	45,300	133,000
July	86,400	41,400	128,000
August	78,400	41,100	119,000
September	79,400	40,600	120,000
October	81,100	39,900	121,000
November	76,400	39,800	116,000
December	80,500	43,000	123,000
Year	1,050,000	549,000	1,600,000
2000:			
January	80,600	40,900	121,000
February	76,400	42,400	119,000
March	80,200	46,700 r/	127,000 r/
April	75,700 r/	43,200 r/	119,000 r/
May	78,800	48,100	127,000
January - May	392,000	221,000	613,000

p/ Preliminary. r/ Revised.

TABLE 3 COPPER PRODUCED AT SMELTERS IN THE UNITED STATES, BY SOURCE 1/2/

(Metric tons, copper content)

	Domestic and		
Period	foreign ores	Scrap	Total
1999: p/			
January - May	545,000	74,800 r/	620,000 r/
May	85,400	12,700	98,200
June	77,000	17,800	94,800
July	84,100	18,500	103,000
August	91,500	18,700	110,000
September	72,400	18,900	91,200
October	72,100	18,900	91,100
November	68,900	19,100	88,000
December	76,300	18,700	95,000
Year	1,090,000	205,000	1,290,000
2000:			
January	61,600	18,400	80,000
February	_ 68,400	17,500	85,900
March	79,200	17,300	96,500
April	64,300	17,300	81,600
May	75,400	17,400	92,800
January - May	349,000	87,900	437,000

p/ Preliminary. r/ Revised.

<sup>1/</sup> Data are rounded to no more than three significant digits; may not add to totals shown.

 $<sup>2/\</sup>operatorname{Includes}$  production from Alaska, Idaho, Missouri, Montana, Nevada, New Mexico, and Utah.

<sup>1/</sup>Includes blister, anode and black copper from primary or secondary

 $<sup>2/\,\</sup>mbox{Data}$  are rounded to no more than three significant digits; may not add to totals shown.

### ${\bf TABLE~4}$ PRODUCTION OF REFINED COPPER, BY SOURCE AND METHOD OF RECOVERY 1/

#### (Metric tons)

		Primary	materials			Scrap		
	Electrol	ytically			Electro-			
	refine	ed 2/			lytically	Fire		Total
Period	Domestic 3/	Foreign	Electrowon	Total	refined 2/	refined	Total	refined
1999: p/								
January - May r/	504,000	108,000	252,000	863,000	63,000	41,100	104,000	968,000
May	106,000	12,300	51,000	169,000	11,300	5,960	17,200	186,000
June	95,500	12,100	48,900	157,000	12,500	6,100	18,600	175,000
July	77,300	15,100	48,600	141,000	13,500	8,740	22,300	163,000
August	83,200	11,900	46,300	141,000	13,500	5,770	19,300	161,000
September	90,800	12,700	47,600	151,000	13,400	7,880	21,300	172,000
October	89,700	14,100	47,500	151,000	13,200	6,970	20,200	172,000
November	81,800	12,100	46,900	141,000	13,300	3,900	17,200	158,000
December	84,600	10,500	48,400	144,000	13,700	6,260	20,000	164,000
Year	1,110,000	196,000	586,000	1,890,000	156,000	86,800	243,000	2,130,000
2000:	_							
January	80,600	9,910	47,700	138,000	13,600	5,850	19,500	158,000
February	75,300	11,500	44,500	131,000	13,900	4,730	18,600	150,000
March	89,200	10,800	47,800 r/	148,000 r/	15,400	10,400	25,800	174,000 r/
April	64,700	11,300	47,000 r/	123,000	14,100	8,390	22,500	146,000 r/
May	72,500	12,900	47,800	133,000	20,300	8,020	28,400	162,000
January - May	382,000	56,400	235,000	673,000	77,300	37,400	115,000	788,000

p/ Preliminary. r/ Revised.

 ${\bf TABLE~5}$  COPPER RECOVERABLE IN UNALLOYED AND ALLOYED FORM FROM PURCHASED COPPER-BASE SCRAP 1/

#### (Metric tons, copper content)

					Brass	and			
	Refineri	ies 2/	Ingot mal	Ingot makers 3/		wire-rod mills		Foundries, etc. 3/	
Period	New scrap	Old scrap	New scrap	Old scrap	New scrap	Old scrap	New scrap	Old scrap	Total 4/
1999: p/									
January - May	25,700 r/	78,300 r/	/ 14,900 r/	40,700 r	/ 338,000 r/	13,400	4,380 r/	16,900 r/	532,000 r/
May	4,710	12,500	2,990	8,140	66,600	2,020	875	3,390	101,000
June	4,850	13,700	2,990	8,140	67,400	2,410	875	3,390	104,000
July	6,300	16,000	2,990	8,140	64,300	1,630	875	3,390	104,000
August	5,140	14,100	2,990	8,140	66,400	1,470	875	3,390	102,000
September	6,050	15,200	2,990	8,140	66,700	1,480	875	3,390	105,000
October	5,400	14,800	2,990	8,140	68,900	1,110	875	3,390	106,000
November	3,590	13,600	2,990	8,140	68,000	2,470	875	3,390	103,000
December	4,740	15,200	2,990	8,140	64,400	1,960	875	3,390	102,000
Year	61,800	181,000	35,800	97,600	804,000	25,900	10,500	40,600	1,260,000
2000:									
January	4,510	14,900	2,990	8,140	71,400	3,180	875	3,390	109,000
February	3,970	14,600	2,990	8,140	68,100	1,240	875	3,390	103,000
March	5,840	20,000	2,990	8,140	73,000	2,300	875	3,390	116,000
April	4,500	18,000	2,990	8,140	67,300	1,200	875	3,390	106,000
May	4,070	24,300	2,990	8,140	68,200	2,460	875	3,390	114,000
January - May	22,900	91,800	14,900	40,700	348,000	10,400	4,380	16,900	550,000

p/ Preliminary. r/ Revised.

<sup>1/</sup> Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>2/</sup> Based on source of material at smelter level.

<sup>3/</sup> Includes fire-refined copper.

<sup>1/</sup> Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>2/</sup> Electrolytically refined and fire-refined scrap based on source of material at smelter level.

 $<sup>3/\,</sup>Monthly$  data and 1999 cumulative data estimated based on 1998 annual data.

<sup>4/</sup> Does not include an estimate, based on reported 1998 data, of 3,540 tons per month from new scrap and 2,840 tons per month from old scrap of copper recovered from scrap other than copper-base.

 ${\it TABLE~6}$  PRODUCTION, SHIPMENTS, AND STOCKS OF BRASS AND WIRE-ROD MILL SEMIFABRICATES 1/

(Metric tons, gross weight)

	Pro	Production		ipments	Stocks, e	Stocks, end of period	
Period	Brass mills	Wire rod mills	Brass mills	Wire rod mills	Brass mills	Wire rod mills	
1999: p/							
January - May r/	692,000	912,000	701,000	907,000	XX	XX	
May	138,000	181,000	138,000	180,000	53,300	36,400	
June	138,000	184,000	140,000	183,000	51,000	37,400	
July	122,000	169,000	126,000	169,000	47,600	37,600	
August	139,000	187,000	136,000	184,000	51,300	40,900	
September	143,000	182,000	139,000	181,000	48,200	42,500	
October	141,000	181,000	140,000	179,000	49,100	44,900	
November	136,000	177,000	136,000	180,000	48,900	41,400	
December	134,000	161,000	131,000	154,000	51,900	48,000	
Year	1,650,000	2,150,000	1,650,000	2,140,000	XX	XX	
2000:							
January	140,000	157,000	138,000	162,000	53,100	41,600	
February	142,000	169,000	142,000	170,000	52,700	39,900	
March	150,000	174,000	151,000	175,000	52,500	38,900	
April	143,000	176,000	144,000	171,000	51,600	42,300	
May	145,000	177,000	146,000	182,000	51,200	38,900	
January - May	719,000	853,000	721,000	860,000	XX	XX	

p/ Preliminary. r/ Revised. XX Not applicable.

TABLE 7 CONSUMPTION OF REFINED COPPER 1/

(Metric tons)

	Wire rod	Brass	Other	
Period and item	mills	mills 2/	plants 3/	Total
1999: p/				_
January - May r/	937,000	279,000	23,600	1,240,000
May	185,000	60,100	4,730	250,000
June	189,000	59,900	4,730	254,000
July	174,000	58,500	4,730	238,000
August	201,000	58,400	4,730	264,000
September	187,000	60,700	4,730	252,000
October	191,000	63,600	4,730	259,000
November	184,000	58,800	4,730	247,000
December	169,000	52,600	4,730	226,000
Year	2,230,000	691,000	56,700	2,980,000
2000:				
January	172,000	59,700	4,730	236,000
February	179,000	59,900	4,730	243,000
March	192,000	64,800	4,730	261,000
April	190,000	63,800	4,730	258,000
May:				
Cathodes	189,000	46,200	940	236,000
Wire bars			W	W
Ingots and ingot bars		1,520	1,600	3,130
Cakes and slabs	W	6,260	W	6,260
Billets and other	758	6,230	2,180	9,170
Total	190,000	60,200	4,730	255,000
January - May	922,000	308,000	23,600	1,250,000

p/ Preliminary. r/ Revised. W Withheld to avoid disclosing company proprietary data; included with "Billets and other." -- Zero.

 $<sup>1/\,\</sup>mbox{Data}$  are rounded to no more than three significant digits; may not add to totals shown.

<sup>1/</sup> Data are rounded to no more than three significant digits; may not add to totals shown.

 $<sup>2/\</sup>ln 1998$ , brass mills consumed 1,500 tons of refined lead, 600 tons of pig tin, 2,400 tons of refined nickel and 53,200 tons of slab zinc.

<sup>3/</sup> Consumption by ingot makers, chemical plants, foundries, and miscellaneous manufacturers is estimated based on 1998 annual data.

### TABLE 8 U.S. APPARENT CONSUMPTION OF COPPER 1/

#### (Metric tons)

	Refined copper	Copper in	Refined general	Refined	Stock change	Apparent
Period	production	old scrap 2/	imports 3/	exports 3/	during period	consumption
1999: p/						
January - April	694,000 r/	135,000 r	/ 275,000	6,650	111,000 r/	987,000 r/
May	169,000	28,900	57,100	1,630	3,890	250,000
June	157,000	30,500	60,600	4,240	(24,300)	268,000
July	141,000	32,000	61,000	1,560	(14,100)	246,000
August	141,000	29,900	79,600	1,500	(13,500)	263,000
September	151,000	31,100	85,200	1,180	(30,300)	297,000
October	151,000	30,300	106,000	1,400	7,790	279,000
November	141,000	30,500	114,000	3,710	(8,180)	290,000
December	144,000	31,600	76,300	3,330	3,240 r/	245,000
Year	1,890,000	379,000	915,000	25,200	34,500	3,120,000
2000:	_					
January	138,000	32,500	115,000	1,560	7,880 r/	276,000 r/
February	131,000	30,300	59,900	5,330	(9,430) r/	226,000 r/
March	148,000 r/	36,600	70,100	22,000	(28,400) r/	261,000 r/
April	123,000	33,600	79,500	12,200	(42,800)	267,000
May	133,000	41,100	NA	NA	(59,700)	NA
January - April	540,000	133,000	324,000	41,200	(72,700)	1,030,000

p/ Preliminary. r/ Revised. NA Not available.

TABLE 9
CONSUMPTION OF PURCHASED COPPER-BASE SCRAP 1/

(Metric tons, gross weight)

	Smel	ters			Brass	and			
	and refineries		Ingot ma	kers 2/	wire-rod	mills 3/	Foundries, etc. 2/		Total scrap
Period	New scrap	Old scrap	New scrap	Old scrap	New scrap	Old scrap	New scrap	Old scrap	used
1999: p/									
January - May	29,500 r/	113,000 r/	19,900 r/	57,700 r	/ 428,000 r/	13,800	5,500 r/	19,000 r/	686,000 r/
May	5,390	18,300	3,980	11,500	84,300	2,090	1,100	3,800	131,000
June	5,470	18,400	3,980	11,500	85,500	2,500	1,100	3,800	132,000
July	6,470	21,400	3,980	11,500	80,500	1,690	1,100	3,800	131,000
August	5,200	19,400	3,980	11,500	84,400	1,530	1,100	3,800	131,000
September	6,130	20,300	3,980	11,500	84,300	1,550	1,100	3,800	133,000
October	5,980	21,400	3,980	11,500	87,600	1,170	1,100	3,800	137,000
November	3,650	18,900	3,980	11,500	86,200	2,550	1,100	3,800	132,000
December	4,810	19,900	3,980	11,500	82,000	2,030	1,100	3,800	129,000
Year	67,200	252,000	47,800	138,000	1,020,000	26,800	13,200	45,600	1,610,000
2000:									
January	4,570	19,300	3,980	11,500	90,200	3,250	1,100	3,800	138,000
February	4,030	18,200	3,980	11,500	85,900	1,310	1,100	3,800	130,000
March	5,950	21,800	3,980	11,500	93,400	2,400	1,100	3,800	144,000
April	4,560	20,800	3,980	11,500	86,200	1,260	1,100	3,800	133,000
May	7,790	17,600	3,980	11,500	86,900	2,530	1,100	3,800	135,000
January - May	26,900	97,700	19,900	57,700	443,000	10,700	5,500	19,000	680,000

p/ Preliminary. r/ Revised.

 $<sup>1/\,\</sup>text{Data}$  are rounded to no more than three significant digits; may not add to totals shown.

<sup>2/</sup> Includes reported monthly production of copper from old scrap of copper-base, an estimate for annual reporters, and a monthly average of copper from non-copper-base materials based on 1998 data.

<sup>3/</sup> Source: Bureau of the Census.

<sup>1/</sup> Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>2/</sup> Monthly data and 1999 cumulative data estimated from 1998 annual data.

<sup>3/</sup> Consumption at brass and wire-rod mills assumed equal to receipts.

### ${\it TABLE~10} \\ {\it CONSUMPTION~OF~PURCHASED~COPPER-BASE~SCRAP~1/~2/} \\$

(Metric tons, gross weight)

	1999 p/		2000				
Scrap type and processor	January - May	Year	March	April	May	January - May	
No. 1 wire and heavy:							
Smelters and refiners	42,400 r/	107,000	10,200	8,490	8,520	43,000	
Brass and wire-rod mills	181,000	431,000	37,900	34,300	37,100	186,000	
No. 2 mixed heavy and light:							
Smelters and refiners	64,600 r/	133,000	12,300	11,700	11,700	55,400	
Brass and wire-rod mills	11,400	21,200	1,820	1,790	967	8,120	
Total unalloyed scrap:							
Smelters and refiners	107,000 r/	240,000	22,500	20,200	20,200	98,400	
Brass and wire-rod mills	192,000	452,000	39,700	36,000	38,100	194,000	
Red brass: 3/							
All plants	26,100 r/	62,800	5,220	5,000	5,330	25,900	
Leaded yellow brass:							
All plants	177,000 r/	422,000	39,700	35,400	35,600	181,000	
Yellow and low brass:							
All plants	31,500 r/	75,200	7,340	7,300	7,060	34,600	
Cartridge cases and brass:							
Smelters and refiners	W	W	W	W	W	W	
Brass mills	33,700 r/	78,400	6,430	5,770	6,280	31,000	
Auto radiators:							
Smelters and refiners	22,200 r/	55,200	4,550	4,550	4,550	22,800	
Bronzes:							
Smelters and refiners	5,740 r/	13,800	1,150	1,150	1,150	5,740	
Brass mills	4,640 r/	9,870	1,170	1,020	1,030	5,140	
Nickel-copper alloys:							
All plants	8,430 r/	22,300	2,670	3,270	2,480	14,200	
Low grade and residues:							
Smelters and refiners	44,200 r/	100,000	6,980	6,980	6,980	35,100	
Other alloy scrap: 4/							
Smelters and refiners 5/	6,260 r/	14,000	1,050	1,050	1,050	5,240	
Brass mills	2,040	5,060	565	565	565	2,800	
Total alloyed scrap:							
Smelters and refiners	113,000 r/	266,000	20,700	20,700	20,700	104,000	
Brass mills	249,000	593,000	56,100	51,400	51,400	260,000	
Total scrap:							
Smelters and refiners	220,000 r/	506,000	43,200	40,900	40,900	202,000	
Brass and wire-rod mills	442,000 r/	1,050,000	95,800	87,400	89,400	453,000	
p/ Preliminary, r/ Revised, W Wi	ithheld to avoid disclosi	ng company p	roprietary data	: included in	"Other alloy	scrap: Smelters	

p/Preliminary. r/Revised. W Withheld to avoid disclosing company proprietary data; included in "Other alloy scrap: Smelters and refiners."

<sup>1/</sup> Does not include: consumption by foundries, chemical plants, and miscellaneous manufacturers, estimated to total about 4,830 tons of scrap per month in 1998; monthly data include estimates of about 16,600 tons of scrap per month consumed by ingot makers and several smelters that report on an annual basis.

<sup>2/</sup> Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>3/</sup> Includes composition turnings, silicon bronze, zincy bronze, railroad car boxes, cocks and faucets, gilding metal, and commercial bronze.

<sup>4/</sup> Includes refinery brass, beryllium copper, phosphor copper, and aluminum bronze.

<sup>5/</sup> Includes items indicated by symbol W.

### $\begin{tabular}{l} TABLE~11\\ COPPER~STOCKS~AT~END~OF~PERIOD~1/\\ \end{tabular}$

#### (Metric tons)

				Re	fined copper			
	Crude		Wire rod					Total
Period	copper 2/	Refineries 3/	mills 3/	Brass mills 3/	Other 4/	Comex 5/	LME 6/	refined
1999: p/								
May	132,000	43,200	34,700	20,600	4,680 r/	119,000	424,000	646,000 r/
June	134,000	26,600	32,500	18,600	4,680 r/	121,000	418,000	622,000 r/
July	137,000	14,100	38,100	20,500	4,680 r/	109,000	421,000	608,000 r/
August	154,000	18,100	29,900	18,600	4,680 r/	98,700	424,000	594,000 r/
September	149,000	14,300	34,300	16,600	4,680 r/	88,500	406,000	564,000 r/
October	140,000	14,300	37,800	17,800	4,680 r/	82,400	415,000	572,000 r/
November	144,000	11,500	34,100	20,900	4,680 r/	82,400	410,000	563,000
December	138,000	9,830	34,000 r/	/ 23,600	4,680 r/	83,100	412,000	567,000 r/
2000:								
January	125,000	9,180	41,100	24,200	4,680 r/	86,700	409,000	575,000 r/
February	121,000	9,880	25,200 r/	24,700	4,680 r/	86,800	414,000	565,000 r/
March	118,000	12,500	35,300	28,400	4,680 r/	87,000	369,000	537,000 r/
April	119,000	10,800	35,100	32,900	4,680 r/	78,500	332,000	494,000 r/
May	104,000	11,500	39,300	16,100	4,680	68,100	295,000	434,000

p/ Preliminary. r/ Revised.

- 1/ Data are rounded to no more than three significant digits; may not add to totals shown.
- 2/ Copper content of blister and other materials in transit and in process of refining.
- 3/ Stocks of refined copper as reported; no estimates are made for nonrespondents.
- 4/ Monthly estimates based on reported and 1998 annual data, comprising stocks at secondary smelters, chemical plants, foundries, and miscellaneous manufacturers.
- 5/ Commodity Exchange Inc., New York.
- 6/ London Metal Exchange Ltd., U.S. warehouses.

TABLE 12 AVERAGE PRICE OF COPPER IN THE UNITED STATES AND ON THE LONDON METAL EXCHANGE

#### (Cents per pound)

	U.S. producers	Comex	LME	
	delivered price	first	cash price	
Period	cathode 1/	position 2/	Grade A	
1999:				
May	72.720	69.060	68.528	
June	69.037	65.227	64.506	
July	79.677	76.017	74.371	
August	79.692	75.882	74.715	
September	84.748	80.888	79.379	
October	83.364	79.300	78.186	
November	83.162	79.098	78.343	
December	85.414	81.350	80.029	
Year	75.913	72.111	71.326	
2000:				
January	88.898	84.834	83.624	
February	86.472	82.408	81.664	
March	83.697	79.633	78.879	
April	81.419	77.355	76.127	
May	86.862	82.798	80.974	
January - May	85.470	81.406	80.254	
1/1: 1 "110	1 .1 1 0	·	•	

<sup>1/</sup> Listed as "U.S. producer cathode."

Sources: Platt's Metals Week and American Metal Market.

<sup>2/</sup> Listed as "Comex high grade first position."

### TABLE 13 NEW YORK AVERAGE BUYING PRICES FOR COPPER SCRAP

(Cents per pound)

			Dealers (	(New York)
		-		Red brass
	Brass mills	Refiners	No. 2	turnings and
Month	No. 1 scrap	No. 2 scrap	scrap	borings
1999:	<u></u>			
May	68.59	56.68	42.80	38.95
June	64.69	52.57	41.55	36.82
July	74.99	62.69	42.71	36.57
August	74.86	61.67	44.00	37.00
September	79.25	63.51	45.00	37.67
October	77.51	61.30	47.00	39.00
November	76.76	61.46	47.20	39.00
December	78.70	62.95	49.00	39.00
Year	70.88	57.53	42.97	37.74
2000:				
January	82.48	66.30	49.00	39.00
February	79.76	63.90	49.00	39.00
March	77.63	62.24	49.00	39.00
April	74.28	59.96	49.00	39.00
May	80.41	65.22	49.00	39.00
January - May	78.91	63.52	49.00	39.00

Source: American Metal Market.

 ${\it TABLE~14}$  U.S. IMPORTS FOR CONSUMPTION OF COPPER (UNMANUFACTURED), BY CLASS 1/

(Metric tons, copper content)

	Ore and concentrate			Matte, ash and precipitates			Blis	ter and ano	des	Refined			
		2000	)		2000	0		200	00		2000		
Country or		Ja	nuary -		Ja	nuary -			January -		January		
territory	1999	April	April	1999	April	April	1999	April	April	1999	April	April	
Brazil										13,600		2,500	
Canada	3			4		1	79,400	5,880	25,700	258,000	21,600	78,500	
Chile	110,000					1	87,000	5,450	28,700	145,000	19,900	65,000	
Indonesia	31,900												
Japan				49			(2/)			5,600	379	1,300	
Kazakhstan										15,300	6,000	16,100	
Malaysia				76		20							
Mexico	500			987	40	217	19,700		1,530	107,000	10,200	35,100	
Netherlands				369		173			(2/)	3,660			
Peru							5,380		993	211,000	28,300	102,000	
Russia										49,300	5,550	28,400	
Spain							568		637	11,000			
Taiwan				230	49	199	16			62		40	
Turkey								3,970	3,970	949		1,100	
Other	13			9		(2/)	530	1	273	16,700 r/	216	614	
Total	143,000			1,730	89	612	193,000	15,300	61,800	837,000	92,100	330,000	

r/ Revised. -- Zero.

Source: Bureau of the Census.

 $<sup>1/\,\</sup>mbox{Data}$  are rounded to no more than three significant digits; may not add to totals shown.

<sup>2/</sup> Less than 1/2 unit.

 ${\it TABLE~15} \\ {\it U.S.~EXPORTS~OF~COPPER~(UNMANUFACTURED),~BY~CLASS~1/}$ 

(Metric tons, copper content)

	Ore	and concer	ntrate	Matte, ash and precipitates			Bli	ster and ano	des	Refined			
	-	2000			2000			2000			2000		
Country or			January -	_		January -		January -				January -	
territory	1999	April	April	1999	April	April	1999	April	April	1999	April	April	
Belgium	17			4		8	177		20	404			
Brazil		10,500	10,500	2		3	3		23		15	15	
Canada	30,000	2,020	10,000	25,300	894	4,390	20,500	1,090	4,930	13,800	140	671	
China	18,100	7,960	19,200	10			264	20	37	253	7,520	24,300	
Finland			16,000										
Germany	74	140	285	430			212	41	99	274		27	
Hong Kong	33	65	65			3	3,410	164	773	215	100	119	
Italy							541		160	16	94	97	
Japan	98		65	660			1,350	103	685	84		48	
Korea, Republic of	14	52	344	43		2	520	62	147	164	3	226	
Mexico	13,500	1,110	22,300	123	994	3,380	107		16	1,430	118	640	
Peru	1,040		356				20				3	3	
Philippines			14,700				27		15			4	
Singapore			16				629	61	265	1	640	7,220	
Taiwan				14		4	1,690	142	834	8,060	3,420	7,450	
United Kingdom	158	49	188	15	(2/)	14	268	18	178	93		3	
Other	136	2	21	109 r/	12	35	1,020	105	294	397	194	338	
Total	63,100	21,900	94,000	26,700	1,900	7,830	30,800	1,800	8,480	25,200	12,200	41,200	

r/ Revised. -- Zero.

Source: Bureau of the Census.

TABLE 16 U.S. COPPER SCRAP TRADE 1/

(Metric tons, gross weight)

	Imports							Exports						
	Unalloyed				Alloyed			Unalloyed		Alloyed				
			2000		2000			2000			2000			
Country or		-	January -	_	January -			January -				January -		
territory	1999	April	April	1999	April	April	1999	April	April	1999	April	April		
Canada	6,760	369	2,850	48,200	4,200	17,700	31,800	3,790	14,500	35,700	4,470	14,300		
Chile	5,520		71	1,470	19	347	3		21					
China				1,410		216	51,300	7,500	28,900	34,800	5,210	17,000		
Colombia	690	9	126	2,780	123	737				12		37		
Costa Rica	726	71	273	840	44	270			20					
Dominican Republic	1,200	91	387	960	148	484			20	20				
Ecuador	59	38	132	746	71	220								
Germany	11	34	74	134	4	52	1,120	230	691	2,120	232	1,220		
Guatemala	106	13	108	1,670	87	491								
Honduras	255	21	111	551	35	206				1				
Hong Kong			10	11		17	9,390	634	3,430	4,040	644	2,320		
India							2,580	40	307	26,100	1,260	5,690		
Jamaica	347	8	74	566	91	326								
Japan	292	10	54	49		(2/)	10,500	1,440	6,630	9,690	1,790	5,790		
Korea, Republic of				345	79	245	7,630	1,660	4,680	34,800	4,910	17,400		
Malaysia				873	202	399	192		4	436	171	395		
Mexico	16,300	1,080	5,100	29,400	2,260	9,820	1,610	217	817	20,700	1,010	6,290		
Peru			120	450		41	2			353		2		
Singapore	2			77			1,960	22	909	213	123	653		
Spain	16			1,290	80	199	2,760			2,670	137	1,570		
Taiwan	16		16	554	18	361	4,120	245	1,040	7,510	223	1,090		
United Kingdom	120			2,450	256	1,110	555	24	59	1,700	19	533		
Venezuela	675	8	276	1,980	61	760				36				
Other	1,280	104	355	5,010 r/	677	2,220	2,790 r/	108	807	5,950 r/	899	3,000		
Total	34,400	1,850	10,100	102,000	8,450	36,200	128,000	15,900	62,900	187,000	21,100	77,300		

r/ Revised. -- Zero.

Source: Bureau of the Census.

<sup>1/</sup> Data are rounded to no more than three significant digits; may not add to totals shown.

 $<sup>1/\,\</sup>mbox{Data}$  are rounded to no more than three significant digits; may not add to totals shown.